

FIGURE 1

FIGURE 2

SEQUENCE LISTING SEQ ID NO:1 ATTORNEY DOCKET NO. 015389-004000US INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 15418 base pairs
 - (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)

AAACACAGGA AAAAAAAGAT AAAGAAACGA AAAGAAAAGG GCATCAGTGA GCTTCAGCAG 180 240 GCATTGCCGA AGAAAAGATT AATGGATTTG AACACACAGC AACAGAAACT ACATGAAGTG GCGGCCGCGA GCTCTAATAC GACTCACTAT AGGGCGTCGA CTC GATCAAT GGAAGATGAG AAGTTCCATC GGCCTTACAT ATGTGTAAGC AGAGGCCCTG TAGGAGCAGA GGCAGGGGGA

AAATACTTTA AGAAATAATG TCTAAAAGTT TTTCAAATAT GAGGAAAAAC ATAAAACCAC

360 420 480 540 AGATCCAAGA AGCTCAACAA AACAAAGCAC AAGAAACAGG AAGAAATTAA AAGTTATATC ACAGTCAAAT TGCTGAAAAC CAGCAACAAA GAGAATATCT TAAGAGTATC AGAGGAAAAG AGATTAATGA CAGGCCAAGA AACAATGAAA ACAATACAGA TTTCTTGTAG GAAACACAAG ACAAAAGACA TTTTTAAAA CCAAAAGGAA AAAAATGCT ACATTAAAAT GTTTTTACC

CACTGAAAGT ATATTTCAAA ACATATTTTA GGCCAGGCTT GGTGGCTCAC ACCTGTAATC

099 CCAGCACTTT GGGAGGCCAA GGTGGGTGGA TCGCTTAAGG TCAGGAGTTC GAGACCAGCC

780 720 TGGCCAATAT AGCGAAACCC CATCTGTACT AAAAACACAA AAATTAGCTG GGTGTGGTGA CACATGCCTG TAATCCCAGG TACTCAGGAG GCTAAGGCAG GAGAATTGCT TGAACTGGGA

840 GGCAGAGGTG GTGAGCCAAG ATTGCACCAG TGCACTCCAG CCTTGGTGAC AGAGTGAAAC

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AGGAAAGAAA GAAGGAAGAG AAGACCATGA AACAACCAGA AAACAAACAA CAAAACAGCA 1440 ATTTCAAGAC AAAAGTACA AAAAGAGACA AAGTAATTAT ATAATAA AGCAAAAAGA 1740 1680 1620 AAAAGACATA GAGTGGCTGA ATGGACGAAA AAAACAAGAC TCAATAATCT GTTGCCTACA 1560 1860 ACATATAAGT CTCATGGTAA CCTCAAATAA AAAAACATAT AACAGATACA CCAAAAATAA 1320 TATAACAATT GTGAATTTAT ATGCGCCCAA ĆACTGGGACA CCCAGATATA TACAGCAAAT 1800 GGAGTAATTC CTGACTTATC AATAATAATG CTGGGTGTAA ATGGACTAAA CTCTCCAATC 1500 1080 AAATATATAA ATATACAAGT ATATACAAAT ATATACATAT ATAAATGTAT ATACGTATAT 1200 1140 1020 AAACCAATAA ATTAAATCAT GCCACCAGAA GAAATTACCT TCACTAAAAG GAACACAGGA AGAATATACT TCACCTATAA AGGGACACAT AGACTGAAAA TAAAAGGAAG GAAAAATATT CTATGCAAAT GGAAACCAAA AAAAGAACAG AACTAGCTAC ACTTATATCA GACAAAATAG ATTATTAGAA CTAAGGAGAG AGAGAGCTCC CCATACAATA ATAGCTGGAG ACTTCACCCC GCTTTTAGCA TTGGACAGAT CATCCAGACA GAAAATCAAC CAAAAAATTG GACTTAATCT ATAATATAGA ACAAATGTAC CTAATTGATG TTTACAAGAC ATTTCATCCA GTAGTTGCAG TCCATCTCAA AAACAAACAA ACAAAATACA TATACATAAA TATATATGCA CATATATA ACATATATAT ATAAATATAT AAAAAAACTT TTGGCTGGGC ACCTTTCCAA ATCTCATGGC). ATATAAATAT ACATATAA ATACATATAT AAATATACAT ATATAAATAT ACATATAAA) ATATACATAT ATAAATATAT ACATATATAA ATATACATAT ATAAATATAT ATACATATAT CATATATAAA TATATACA CATATATAAA TCTATATACA TATATACATA TATACACATA TATAAATCTA TATACATATA TATACATATA TAATATTT ACATATATAA ATATATACAT

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3060 3000 CGGGAGGCTG AGGCAGGATA ACCGCTTGAA CCCAGGAGGT GGAGGTTGCG GTGAGCCGGG 2880 GGCCACAGTG GAACAAAACC AGAAATCAAC AACAAGAGGA ATTTTGAAAA CTATACAAAC 2460 2640 2760 2520 2700 2580 2160 2340 2400 2820 CAGAACAAGC CATTAAAAAT TCAAAAAAT TGAGCCAGGC ATGATGGCTT ATGCTTGTAA 2100 AATATGCATT TTTTCCTCAG CATATGGATC ATTCTCAAGG ATAGACCATA TATTAGGCCA 2040 GAGCAAACTA AACCTAAAAT TGGTAAAAGA AAAGAAATAA TAAAGATCAG AGCAGAAATA AAAAGTAGAA AAACTTAAAA ATACAACCTA ATGATGCACC TTAAAGAACT AGAAAAGCAA ATTGCGCCAT TGGACTCCAG CCTGGGTAAC AAGAGTGAAA CCCTGTCTCA AGAAAAAAA AATGAAACTG AAAGATAACA ATACAAAAGA TCAACAAAAT TAAAAAGTTGG TTTTTTGAAA GGGCAGATCG CCTGAGGTCA GGAGTTCGAG ACCAGCCTGA CCAACACAGA GAAACCTTGT ACATGAAAAT TAAACAATAT ACTTCTGAAT AACCAGTGAG TCAATGAAGA AATTAAAAAG TATACAGCAA AAGCAGTGCT AAGAAGGAAG TTTATAGCTA TAAGCAGCTA CATCAAAAA GTAGAAAAGC CAGGCGCAGT GGCTCATGCC TGTAATCCCA GCACTTTGGG AGGCCAAGGC CCAAGAGTTC AAGGCTACGG TGAGCCATGA TTGCAACACC ACACACCAGC CTTGGTGACA GAATGAGACC CTGTCTCAAA AAAAAAAA AAAATTGAAA TAATATAAAG CATCTTCTCT GAAATTGAAA AATTTATTTA AGCAAATGAT AACGGAAACA TAACCTCTCA AAACCCACGG TTACAGCACT TTGGGGAGGG TGAGGTGGGA GGATGTCTTG AGTACAGGAG TTTGAGACCA AGTEGTOTOT GCCTGTAGTC CCAGCTACTT AGGAGGCTGA AGTGGGAGGA TCACTTGAGC CGCTACTAAA AATACAAAAT TAGCTGGGCA TGGTGGCACA TGCCTGTAAT CCCAGCTACT GCCTGGGCAA AATAGTGAGA CCCTGTCTCT ACAAACTTTT TTTTTAATT AGCCAGGCAT

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GCTAGTCTGG AGGCTGAGGT GGGAGAATCA CTTAAGCCTA GGAGGTCGAG GCTGCAGTGA 4140 3960 3420 GCCAGTATTA CCCTGATTCC AAAACCAGAC AAAAACACAT CAAAAAAAA CAAACAAAA 3600 3660 4020 3300 3720 3900). TAAATTCCTA GATGCATACA ACCTACCAAG ATTGAACCAT GAAGAAATCC AAAGCCCAAA: 3360 3840 CCAGGACCCA ATGGCTTCCC TGCTGGATTT TACCAATCAT TTAAAGAAGA ATGAATTCCA 3480 CAGACCAATA ACAATAATGG GATTAAAGCC ATAATAAAAA GTCTCCTAGC AAAGAGAAGC GCCATGAACA TGTCACTGTA CTCCAGCCTA GACAACAGAA CAAGACCCCA CTGAATAAGA AGATAAACAA AATTGACAAA CCTTTGCCCA GACTAAGAAA AAAGGAAAGA AGACCTAAAT GTGGGATGAT TGCTTGGGCC CAGGAGTTTG AGACTAGCCT GGGCAACAAA ATGAGACCTG AACAGAAAGA AAGAAAACTA CAGGCCAATA TCCCTGATGA ATACTGATAC AAAAATCCTC AAATAAAGTC AGAGATGAAA AAAGAGACAT TACAACTGAT ACCACAGAAA TTCAAAGGAT AAACATACAG GCCAGGCACA GTGGCTCACA CCTGCGATCC CAGCACTCTG GGAGGCCAAG CACTAGAGGC TACTATGAGC AACTGTACAC TAATAAATTG AAAAAACCTAG AAAAAATAGA AACAAAACAC TAGCAAACCA AATTAAACAA CACCTTCGAA AGATCATTCA TTGTGATCAA GCATTTGATA AAÀTTCTGCA CCCTTCATGA TAAAAACCCT CAAAAAACCA GGTATACAAG GTCTACAAAA AACTTTTTA AAAAATTAGC CAGGCATGAT GGCATATGCC TGTAGTCCCA ATCCTACTCA AACTATTCTG AAAAATAGAG GAAAGAATAC TTCCAAACTC ATTCTACATG GTGGGATTTA TTCCAGGGAT GGAAGGATGG TTCAACATAT GCAAATCAAT CAATGTGATA CATCATCCCA ACAAAATGAA GTACAAAAC TATATGATTA TTTCACTTTA TGCAGAAAA

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TAACCCAAAC TACATGGTAC TGGCATAAAA ACAGATGAGA CATGGACCAG AGGAACAGAA 5100 GAAAACTATA AAATATTGAT AAAAGAAATT GAAGAGGCCA CAAAAAAAGA AAAGATATTC 4800 GAAGTCCTAG CTAGAGCAAT CAGATAAGAG AAAGAAATAA AAGGCATCCA AACTGGAAAG 4500 5040 5400 5280 4620 TAGAGAATCC AGAAACAAAT CCATGCATCT ACAGTGAACT CATTTTTGAC AAAGGTGCCA 5160 ACAAATTCAA TGCAATCCCT ATTAAAATAC TAATGACGTT CTTCACAGAA ATAGAAGAAA 4920 TAATAAAAGC CCTATATGAC AGACCGAGGT AGTATTATGA GGAAAAACTG AAAGCCTTTC 4380 CTCTAAGATC TGGAAAATGA CAAGGGCCCA CTTTCACCAC TGTGATTCAA CATAGTACTA 4440 GAAGAAGTCA AATTATCCTG TTTGCAGATG ATATGATCTT ATATCTGGAA AAGACTTAAG 4560 AAAAATCAGT AGTATTTCTA TATTCCAACA GCAAACAATC TGAAAAAGAA ACCAAAAAAG AAAAGAACAA AÀCTGGAAGC ATCACATTAC CTGACTTCAA ATTATACTAC AAAGCTATAG ATGGATGAAA GGCTTAAATC TAAAACCTCA AACTTTGCAA CTACTAAAAG AAAACACCGG AGAACATACT TTGGGGAAAA GATAATCTCT TCAATAAATG GTGCTGGAGG AACTGGATAT ACACCACTAA AAAACTATTA GAGCTGAAAT TTGGTACAGC AGGATACAAA ATCAATGTAC CAATTCTAAG ATTTGTACAG AACCACAAAA GACCCAGAAT AGCCAAAGCT ATCCTGACCA CAGCTACAAA TAAAATTAAA CAGCTAGGAA TTAACCAAAG AAGTGAAAGA TCTCTACAAT AGAAACTCTC CAGGACATTG GAGTGGGCAA AGACTTCTTG AGTAATTCCC TGCAGGCACA CCATATGCAA AATAACAATA CTAGAACTCT GTCTCTCACC ATATACAAAA GCAAATCAAA CATGITCATA GATTGGAAGA ATAAATACTG TTAAAATGTC CATACTACCC AAAGCAATTT

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AACAGCATGG GĠGGCACTGG TCAGTATGTT AAGTGAAATA AGCCAGGCAC AGAAAGACAA 6180 AAAGGAAACA ATCAACAAAG AGAAGAGACA ACCCACAGAA TGGGAGAATA TATTTGCAAA 5520 0909 AGGAGAATGG TGGTTCTAGA GGGGTGGGG ACAGGGTGAC TAGAGTCAAC AATAATTTAT 6300 6120 GGCAACCAAA GCAAAACAG ACAAATGGGA TCATATCAAG TTAAAAAAGCT TCTGCCCAGC 5460 5940 5700 6360 6540 5640 5760 ACACTGTTGG TGGGAATGGA AATTGCTACC ACTATGGAGA ACAGTTTGAA AGTTCCTCAA 5880 6240 6480 6420 0009 AGCCAAGGTT TGGAAGCAAC CTCAGTGTCC ATCAACAGAC GAATGGAAAA AGAAAATGTG GTGCACATAC ACAATGGAGT ACTACGCAGC CATAAAAAAG AATGAGATCC TGTCAGTTGC TATTCAAAAG ACAGGCAATA ACAAATGCCA GTGAGGATGT GGATAAAAGG AAACCCTTGG AAAACTAAAA ATAAAGCTAC CATACAGCAA TCCCATTGCT AGGTATATAC TCCAAAAAAG TGTATGTTTT AAAATAACTA AAAGAGTATA ÁTTGGGTTGT TTGTAACACA AAGAAAGGAT). GAAAAACACC TAATAAGCTG ATTTTCAAAA ATAAGCAAAA GATCTGGGTA GACATTTCTC AAAATAAGTC ATACAAATGG CAAACAGGCA TCTGAAAATG TGCTCAACAC CACTGATCAT TTTTAATGGC CAGGCACGGT GGCTCATGTC CATAATCCCA GCACTTTGGG AGGCCGAGGC ACTITICATG TICICCCITA CITGIGGGAG CAAAAAITAA AACAAITGAC ATAGAAATAG CTGTATCAAA ATATCTCATG TATGCTATAG ATATAAACCC TACTATATTA AAAATTAAAA GGAATCAGTG TATCAACAAG CTATCTCCAC TCCCACATTT ACTGCAGCAC TGTTCATAGC AAATGCTTGA AGGTGACAGA TACCCCATTT ACCCTGATGT GATTATTACA CATTGTATGC CTATTCATCT AACAAGGAAT TAATAACCAG TATATATAAG GAGCTCAAAC TACTCTATAA CAGAGAAATG CAAATCAAAA CTACTATGAG AGATCATCTC ACCCCAGTTA AAATGGCTTT

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GTGCAAGGCA GAGGCCTGAT GACCCGAGGA CAGGAAAGCT CGGATGGGAA GGGGCGATGA 7440 CTCAAACCCA GGCCAGCAGC TATGGCGCCC ACCCGGGCGT GTGCCAGAGG GAGAGGAGTC 7620 GCTCTGGATA CCATCTGGAA AAGGCGGCCA GCGGGAATGC AAGGAGTCAG AAGCCTCCTG 7560 CAGGAGGCTG AGACAGGAGA ATTGCTTGAA CCTGGGAGGC GGAGGTTGCA GTGAGCCGAG 6720 AATCCTGAAA CGÀAAAATGG TGGTGATTTC CTCCAGAAGA ATTAGAGTAC CTGGCAGGAA 7320 TAATTTTAAC CAAAGACAGG CTGGGAGAAG TTAAAGAGGC ATTCTATAAG CCCTAAAACA 7080 77 ATCATGCCAC TGCACTGCAG CCTGGGTGAC AGAGCAAGAC TCCATCTCAA AACAAAACA 6780 TAGAAGTTAA AAATTAAAAC AATTATAAAA GGTAATTAAC CACTTAATCT AAAATAAGAA 6900 GCAGGTGGCT CTGTGGACCT GAGCCACTTC AATCTTCAAG GGTCTCTGGC CAAGACCCAG 7380 0969 GGTGGATCAC CTGAGGTCAG GAGTTTGAAA CCAGTCTGGC CACCATGATG AAACCCTGTC 6600 TGTGAGGAGG GAACAGTGGA AGTTACTGTT GTTAGACGCT CATACTCTCT GTAAGTGACT 7020 ACTGCTAATA ATGGTGAAAG GTAATCTCTA TTAATTACCA ATAATTACAG ATATCTCTAA 7140 AATCGAGCTG CAGAATTGGC ACGTCTGATC ACACCGTCCT CTCATTCACG GTGCTTTTT 7200 TCTTGTGTGC TTGGAGATTT TCGATTGTGT GTTCGTGTTT GGTTAAACTT AATCTGTATG 7260 CAATGTATGT GGGGTTTCTA GCTTCTGAAG AAGTAAAAGT TATGGCCACG ATGGCAGAAA GAAGCCTGCC TCGTTGGTGA GCAGCGCATG AAGTGCCCTT ATTTACGCTT TGCAAAGATT AAGGCACCTC GAAGTATGGC TTAAATCTTT TTTTCACCTG AAGCAGTGAC CAAGGTGTAT TCTACTAAAG ATACAAAAT TAGCCAGGCG TGGTGGCACA TACCTGTAGT CCCAACTACT () AAAAAAGAA GATTAAAATT GTAATTTTA TGTACCGTAT AAATATATAC TCTACTATAT

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GAGAGGACTG GGCGGCAGGG CTATGAGCAC GGCAAGGCCA CCGGGGAGAG AGTCCCCGGC 8280 8760 7980 CTGGGAGGCT GACAGCAGGA CCACTGACCG TCCTCCCTGG GAGCTGCCAC ATTGGGCAAC 8340 8400 8460 8520 TGAATGATTC CAGCAACTTC TTCGGGTGTG ÁCAAGCCATG ACAACACTCA GTACAAACAC 8640 7920 8700 TITCTIAAAT TICATCAAAT AACATTCAGG AGTGCAGAAA TCCAAAGGCG TAAAACAGGA 8100 8220 ACTGAGCTAT GTTTGCCAAG GTCCAAGGAC TTAATAACCA TGTTCAGAGG GATTTTTCGC 8160 GCCCTCGCGG TITCTGATCG GGACAGAGTG ACCCCCGTGG AGCTTCTCCG AGCCCGTGCT 7860 GCGAAGGCGG CCACGCTGCG TGTGACTCAG GACCCCATAC CGGCTTCCTG GGCCCACCCA CTGCTTCCCT GGGTGGGTCA AGGGTAATGA AGTGGTGTGC AGGAAATGGC CATGTAAATT GAGATGAGGC TGCTTTCAGC CACCAGGCTG GGGTGACAAC AGCGGCTGAA CAGTCTGTTC () GCTTAATAAC AAACTGGGAT GTGGCTGGGG GCGGACAGCG ACGGCGGGAT TCAAAGACTT CACTAACCCA GGAAGTCACG GAGCTCTGAA CCCGTGGAAA CGAÁCATGAC CCTTGCCTGC CACTCTTTTA CTAGGCCCAC AGAGCACGGC CCACACCCCT GATATATAA GAGTCCAGGA). GAGGACCCTC TIGCAAAGGG CTCCACAGAC CCCCGCCCTG GAGAGAGGAG TCTGAGCCTG CCTAAGTACT TTTTATTGGT TTTCATAAGG TGGCTTAGGG TGCAAGGGAA AGTACACGAG TCTGAGGGAA GCTTGAGTTA GGTGCCTTCT TTAAAACAGA AAGTCATGGA AGCACCCTTC ACACGACTCT GCTGATGGGG ACCGTTCCTT CCATCATTAT TCATCTTCAC CCCCAAGGAC CTCTAGACTA GTAGACCCTG GCAGGCACTC CCCCAGATTC TAGGGCCTGG TTGCTGCTTC AATTCCATGA GTAAATTCAA CCTTTCCACA TCCGAATGGA TTTGGATTTT ATCTTAATAT TCAAGGGAAA ACCAGACGCC CGCTCTGCGG TCATTTACCT CTTTCCTCTC TCCCTCTT

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9840 9720 CCTCACCTAG GTCCACGGGC ACAGGCCTGG GGATGGAGCC CCCGCCAGGG ACCCGCCTT 9420 9780 0096 CCGAGGGCGC CATCTGCCCT GGAGACTCAG CCTGGGGTGC CACACTGAGG CCAGCCCTGT 8880 CACTAAGCAT CCTCTTCCCA AAAGACCCAG CATTGGCACC CCTGGACATT TGCCCCACAG 9540 GCTGTTTTAT TTTAATAGCT ACAAAGCAGG GAAATCCCTG CTAAAATGTC CTTTAACAAA 9660 GGAGGAGATT CTGCGCCTCC CAGACTGGCT CCTCTGAGCC TGAACCTGGC TCGTGGCCCC 9120 AGCTGCGTGT GTCTCTGTCC GCTAGGGTCT CGGGGTTTTT ATAGGCATAG GACGGGGGGG 9300 J' GCACGGTTCC TCCTCACATG GGGTGTCTGT CTCCTTCCCC AACACTCACA TGCGTTGAAG 9060 CCGTGTTCCA GCGCTACTGT CTCACCTGTC CCACTGTGTC TTGTCTCAGC GACGTAGCTC 9000 CCTGTCATCT GCCGGGGCCT GCCGGTGTGT TCTTCTGTTT CTGTGCTCCT TTCCACGTCC 9240 CATGGGATAC GTACGCAACA TGCTCAAAAA GAAAGAATTT CACCCCATGG CAGGGGAGTG CTGGTTAAAC AAACGGGTCC ATCCGCACGG TGGACAGTTC CTCACAGTGA AGAGGAACAT GTTGGGGGGT TAAGGACGGT GGGGGCAGCA GCTGGGGGGCT ACTGCACGCA CCTTTTACTA TGGTGGGCCA GGGCGCTCTT GGGAAATGCA ACATTTGGGT GTGAAAGTAG GAGTGCCTGT CCCTGGGAAT TCACGTGACT ACGCACATCA TGTACACACT CCCGTCCACG ACCGACCCC GCCGTTTATA AAGCCTGCAG GCATCTCAAG GGAATTACGC TGAGTCAAAA CTGCCACCTĊ AAGCCAGTTT CCTGGTTCTG ATGGTATTGG CTCAGTTATG GGAGACTAAC CATAGGGGAG CTCTGCCCAG CACTTTTCTG CCCCCTCCC TCTGGAACAC AGAGTGGCAG TTTCCACAAG CGATGCAGGT TCCTGGCGTC CGGCTGCACG CTGACCTCCA TTTCCAGGCG CTCCCCGTCT CTCCACACCC TCCGCCTCCA GGCCTCAGCT TCTCCAGCAG CTTCCTAAAC CCTGGGTGGG

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GAGGGGGCA GCCTCAGGAC GATGGAGGCA GTCAGTCTGA GGCTGAAAAG GGAGGGAGGG 10260 TITACAGAAA CATCCAAGGA CAGGGCTGAA GTGCCTCCGG GCAAGGGCAG GGCAGGCACG 10560 ACTACCTGCA GGCCCGAAAA GTAATCCAGG GGTTCTGGGA AGAGGCGGGC AGGAGGGTCA 10200 CCTCGAGCCC AGGCCTGCAA GCGCCTCCAG AAGCTGGAAA AAGCGGGGAA GGGACCCTCC 10320 ACGGAGCCTG CAGCAGGAAG GCACGGCTGG CCCTTAGCCC ACCAGGGCCC ATCGTGGACC 10380 ATTTGCAGAA GCAACAGGAA ACCCATGCAC TGTGAATCTA GGATTATTTC AAAACAAAGG 10500 GTITCTGTGA CCACCTGTTA TCCCATGGGA CCCACTGCAG GGGCAGCTGG GAGGCTGCAG 11100 TGGGGATGGG GGAACCCGGA GGCTGTGCCA TCTTTGCCAT GCCCGAGTGT CCTGGGCAGG 10020 GCCCCAGGGC CTTTGCAGGT GTGATCTCCG TGAGGACCCT GAGGTCTGGG ATCCTTCGGG 10140 TCCGGCCTCC GTGCCATAGG AGGGCACTCG CGCTGCCCTT CTAGCATGAA GTGTGGGG 10440 TCTCAAAATC CTGACCTCAG GTGATCCGCC CACCTCAGCC TCCCAAAGTG CTGGGATTAC 10860 ATAATGCTCT AGAGATGCCC ACGTCCTGAT TCCCCCAAAC CTGTGGACAG AACCCGCCCG 10080 GTTCAAGCAA TÌCTCGTGCC TCAGCCTCCC AAGTAGCTGG GATTTCAGGC GTGCACCACC 10740 AGGCATGAGC CACTGCACCT GGCCTATTTA ACCATTTTAA AACTTCCCTG GGCTCAAGTC 10920 TGTTGCCCAG GCTGGAGTGC AGCGGCATGA TCTTGGCTCA CTGCAACCTC CGTCTCCTGG 10680 ACACCCGGCT AATTTTGTAT TTTTAGTAGA GATGGGCTTT CACCATGTTG GTCAGGCTGA 10800 ACACCCACTG GTAAGGAGTT CATGGAGTTC AATTTCCCCT TTACTCAGGA GTTACCCTCC 10980 TITGATATIT ICIGIAAITC ITCGIAGACI GGGGATACAC CGICICITGA CAIAITCACA 11040 AGTGATITIA TITAGCIAIT ITAITITAIT TACITACITI CIGAGACAGA GITAIGCICT 10620

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CAAGACGAGG CTAACCTCCA GCGAGCGTGA CAGCCCAGGG AGGGTGCGAG GCCTGTTCAA 12240 AAAGGCTTAG GGATCACTAA GGGGATTTCT AGAAGAGCGA CCCGTAATCC TAAGTATTTA 12180 GCTTCAGGTC CCAGTGGGGT TGCCATCTGC CAGTAGAAAC CTGATGTAGA ATCAGGGCGC 11160 ATTTTCCAAA CCGCCCCTTT GCCCTAGTGG CAGAGACAAT TCACAAACAC AGCCCTTTAA 12120 GAAACATCTG GGTCTGAGGT AGGAAGCTCA CCCCACTCAA GTGTTGTGGT GTTTTAAGCC 11760 GGTATCAGCG ATCTTCATTG AATGCCGGGA GGCGTTTCCT CGCCATGCAC ATGGTGTTAA 11940 AGACATCATC AGCTTTTCAA AGACACACTA ACTGCACCCA TAATACTGGG GTGTCTTCTG 11880 CTAAAGTGCT GGGATTACAG GTGTGAGCCA CCATGCCCAG CTCAGAATTT ACTCTGTTTA 11700 CTATGTTGGC TTCTCTGCAG AGAACCAGTG TAAGCTACAA CTTAACTTTT GTTGGAACAA 12060 GAGTGTGGAC ACTGTCCTGA ATCTCAATGT CTCAGTGTGT GCTGAAACAT GTAGAAATTA 11220 CCACCATGCC CAGCTAATTT TTTTT TAGTAGAGC GGGGGTGGGG GTGGGGTTCA 11580 TIGITGCTCA GGCTGGAGGG AGTGCAATGG CGCGATCTTG GCTTACTGCA GCCTCTGCCT 11460 CCCAGGTTCA AGTGATTCTC CTGCTTCCGC CTCCCATTTG GCTGGGATTA CAGGCACCCG 11520 CCATGTTGGC CAGGCTGGTC TCGAACTTCT GACCTCAGAT GATCCACCTG CCTCTGCCTC 11640 AAGTCCATCC CTCCTACTCT ACTGGGATTG AGCCCCTTCC CTATCCCCCC CCAGGGGCAG 11280 , AGGAGTTCCT CTCACTCCTG TGGAGGAAGG AATGATACTT TGTTATTTTT CACTGCTGGT 11340 AATGATAGAA TITITITATI GITGITAGAA CACTCITGAT GITITACACI GIGATGACTA 11820 TIACTCCAGC ATAATCTTCT GCTTCCATTT CTTCTCTTCC CTCTTTTAAA ATTGTGTTTT 12000

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GCTGGGGCCC TCGCTGGCGT CCCTGCACCC TGGGAGCGCG AGCGGCGCGC GGGCGGGGAA 13200 GCGCGGCCCA GACCCCCGGG TCCGCCCGGA GCAGCTGCGC TGTCGGGGCC AGGCCGGGCT 13260 13320 GGTGGGGACC CCTCGCCGCC TGAGAACCTG CAAAGAGAAA TGACGGGCCT GTGTCAAGGA 12840 GCCCAAGTCG CGGGAAGTG TTGCAGGGAG GCACTCCGGG AGGTCCCGCG TGCCCGTCCA 12900 CACGTCCGGC ATTCGTGGTG CCCGGAGCCC GACGCCCCGC GTCCGGACCT GGAGGCAGCC 13020 CTGGGTCTCC GGATCAGGCC AGCGGCCAAA GGGTCGCCGC ACGCACCTGT TCCCAGGGCC 13080 GATGTGACCA GATGTTGGCC TCATCTGCCA GACAGAGTGC CGGGGCCCCAG GGTCAAGGCC 12660 GICCGAGGCT TGGAGCCAGG TGCCTGGACC CCGAGGCTGC CCTCCACCCT GTGCGGGCGG 12600 AAGGCCTCGG GAGACCCAGA AGTTTCTCGC CCCTTAGATC CAAACTTGAG CAACCCGGAG 12420 GTTGTGGCTG GTGTGAGGCG CCCGGTGCGC GGCCAGCAGG AGCGCCTGGC TCCATTTCCC 12720 GGGACCCGGG CACCCGTCCT GCCCCTTCAC CTTCCAGCTC CGCCTCCTCC GCGCGGACCC 13380 () GGGACCAGTG GCCGTGTGGC TTCTACTGCT GGGCTGGAAG TCGGGCCTCC TAGCTCTGCA 12540 ACCCTTTCTC GACGGGACCG CCCCGGTGGG TGATTAACAG ATTTGGGGGTG GTTTGCTCAT 12780 GGGAGCAATG CGTCCTCGGG TTCGTCCCCA GCCGCGTCTA CGCGCCTCCG TCCTCCCTT 12960 ATGCTAGCTC CATAAATAAA GCAATTTCCT CCGGCAGTTT CTGAAAGTAG GAAAGGTTAC 12300 TCTGGATTCC TGGGAAGTCC TCAGCTGTCC TGCGGTTGTG CCGGGGCCCC AGGTCTGGAG 12480 TCCACATCAT GGCCCCTCCC TCGGGTTACC CCACAGCCTA GGCCGATTCG ACCTCTCTCC 13140 CCCAGTGGAT TCGCGGGCAC AGACGCCCAG GACCGCGCTT CCCACGTGGC GGAGGGACTG ATTTAAGGTT GCGTTTGTTA GCATTTCAGT GTTTGCCGAC CTCAGCTACA GCATCCCTGC

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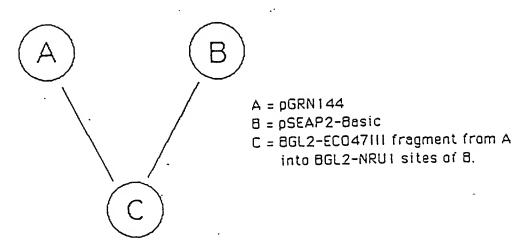
GGGCGGCCGG GGGGAACCAG CGACATGCGG AGAGCAGCGC AGGCGACTCA GGGCGCTTCC 13860 TGGACCCCGA AGGCGTCTGG GATGCGAACG GGCCTGGAAC CATAGCGTCA GGGAGGCCGG 14280 GGTCCCCCTG GGCCTGCCAG CCCCGGGTGC GAGGAGGCGC GGGGGCAGTG CCAGCCGAAG 14340 GCGGGGGAGC GGGGCGTGG GGCTGCTGCT GCGCCGCGTG GGCGACGACG TGCTGGTTCA 14100 TGGGCAGGGG TCCTGGGCCC ACCCGGGCAG GACGCGTGGA CCGAGTGACC GTGGTTTCTG 14460 TCTGCCGTTG CCCAAGAGGC CCAGGCGTGG CGCTGCCCCT GAGCCGGAGC GGACGCCCGT 14400 CGGCGCGAAG AACGTGCTGG CCTTCGGCTT CGCGCTGCTG GACGGGGCCC GCGGGGGCCC 13980 () CGTTCGTGCG GCGCCTGGGG CCCCAGGGCT GGCGGCTGGT GCAGCGCGGG GACCCGGCGG 13680 CCCGCAGGTG TCCTGCCTGA AGGAGCTGGT GGCCCGAGTG CTGCAGAGGC TGTGCGAGCG 13920 CGGGCCGCCG CTGTACCAGC TCGGCGCTGC CACTCAGGCC CGGCCCCCGC CACACGCTAG 14220 CCCCGAGGCC TTCACCACCA GCGTGCGCAG CTACCTGCCC AACACGGTGA CCGACGCACT 14040 TGTGGTGTCA CCTGCCAGAC CCGCCGAAGA AGCCACCTCT TTGGAGGGTG CGCTCTCTGG 14520 GCTGCCGAGC CGTGCGCTCC CTGCTGCGCA GCCACTACCG CGAGGTGCTG CCGCTGGCCA 13620 TCCTGCTGCG CACGTGGGAA GCCCTGGCCC CGGCCACCCC CGCGATGCCG CGCGCTCCCC 13560 CCGCCGCCCC CTCCTTCCGC CAGGTGGGCC TCCCCGGGGT CGGCGTCCGG CTGGGGTTGA 13800 CTITICCGCGC GCTGGTGGCC CAGTGCCTGG TGTGCGTGCC CTGGGACGCA CGGCCGCCCC 13740 CCTGCTGGCA CGCTGCGCGC TCTTTGTGCT GGTGGCTCCC AGCTGCGCCT ACCAGGTGTG 14160 CGCCCCGTCC CGACCCCTCC CGGGTCCCCG GCCCAGCCCC CTCCGGGCCC TCCCAGCCCC 13440 TCCCCTTCCT TTCCGCGGCC CCGCCCTCTC CTCGCGGCGC GAGTTTCAGG CAGCGCTGCG 13500

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CGAGGGCCCA GGCCCCAGAG CTGAATGCAG TAGGGGCTCA GAAAAGGGGG CAGGCAGAGC 15300 GATGAGCGTG CGGGACTGCG CTTGGCTGCG CAGGAGCCCA GGTGAGGAGG TGGTGGCCGT 15240 CCAGGGCTCT GTGGCGGCCC CCGAGGAGGA GGACACAGAC CCCCGTCGCC TGGTGCAGCT 15000 CAAGAAGTTC ATCTCCCTGG GGAAGCATGC CAAGCTCTCG CTGCAGGAGC TGACGTGGAA 15180 GCACTGCCCG CTGCGAGCTG CGGTCACCCC AGCAGCCGGT GTCTGTGCCC GGGAGAAGCC 14940 GCTGGTGCCC CCAGGCCTCT GGGGCTCCAG GCACAACGAA CGCCGCTTCC TCAGGAACAC 15120 SATGCCAGGG ACTCCCCGCA GGTTGCCCCG CCTGCCCCAG CGCTACTGGC AAATGCGGCC 14820 GCTCCGCCAG CACAGCAGCC CCTGGCAGGT GTACGGCTTC GTGCGGGCCT GCCTGCGCCG 15060 CACGCGCCAC TCCCACCCAT CCGTGGGCCG CCAGCACCAC GCGGGCCCCC CATCCACATC 14580 GCGGCCACCA CGTCCCTGGG ACACGCCTTG TCCCCCGGTG TACGCCGAGA CCAAGCACTT 14640 J. GCCCAGCCTG ACTGGCGCTC GGAGGCTCGT GGAGACCATC TTTCTGGGTT CCAGGCCCTG 14760 CCTGTTTCTG GAGCTGCTTG GGAACCACGC GCAGTGCCCC TACGGGGTGC TCCTCAAGAC 14880 CCTCTACTCC TCAGGCGACA AGGAGCAGCT GCGGCCCTCC TTCCTACTCA GCTCTCTGAG 14700 CCTGGTCCTC CTGTCTCCAT CGTCACGTGG GCACACGTGG CTTTTCGCTC AGGACGTCGA 15360 GTGGACACGG TG ATCGAGTC GACTCCTTT AGTGAGGGTT AATTGAGCTC GCGGCCGC 15418

SF 195035 v1

Promoter Reporter Construct



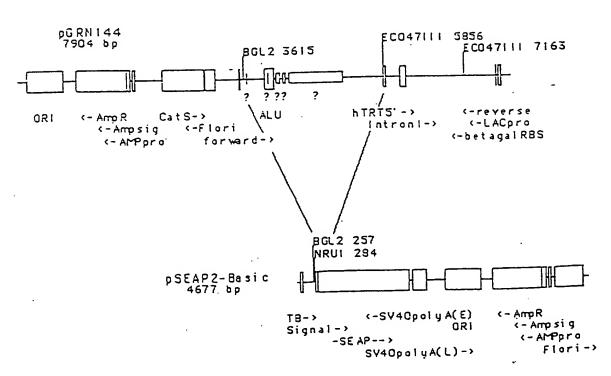


FIGURE 3

FIGURE 4A

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Al reporter

						•
SRY HINFB	-1506 -1530 -1560 -1576 -1550 -1550 -1560 -1530		-1500 -1450 -1480 -1470 -: 669 -1450 -1449 -1419 -1420 radettricinal decentricely and conference of the conference of t	1360 -1390 -1360 -1370 -1350 -1350 -1340 -1330 -1330 -1330 -1310 -1310 -1310 -1310 -13	-1306 Cdx + 1230 -1230 -1275/Myb -1260 -1250 ATGCTAGCTATATATA. AAGCAATTCCTCCGGCAGTTTCTAAACTAGGAAAGGTTACAT	-1206 -1130 -1180 -1170 -116067F -2150 -1140 GBP -1130 -1120 -1110 DAN CCTCHOCTACACATCCTACCACCACACCACACACACACACACACA
	Human	Mouse	Human Mouse	Xuraz House	Huran	; Euroan Kouse

FIGURE 5

SEQUENCE LISTING SEQ ID NO:2

ATTORNEY DOCKET NO. 015389-004000US

INFORMATION FOR SEO ID NO:2:

B2.18

7498 bp

DEFINITION Genomic sequence of the murine Telomerase reverse transcriptase

gene promoter region.

GenBank ACCESSION NO: B2.18 AF121949

BASE COUNT

1944 a

1857 c 1815 g 1882 t

1 aagetteeag caaaceagtt agagetgagt tgatgetetg aagaagagaa aatgtagaga

61 cggtactgaa caaataatgt ctgggcaaac ctcagacatg aaaatggaag acgtggaaat

121 ccagagaact ctgagggaaa ataaaacaca actccaggtc atcacgggac tcatcaaact

181 gctgaggtgc agccacagag aaaaatctta aaatagccta gaacgatgca tgacacataa

241 agcacagaga agacgaagct gagtetgtet tgtaggaaca aettgagaag acctaaacca

301 ctgcaatgag tgcattctgc taacttagaa tttgctaccc agttcagatc caaaaagggt

361 ttcacaaagt tcaacacaaa acagtagcag gagtggctaa gggggacaca ctgataggaa

421 ttcagagaag tagggaatgc tcatatgggg acattacaaa atgtactttc atgttgctta

481 aatcatttta attgtcaacc acatcaagct aaataatgct ttgaggttca taacatttgg

541 agattatgtc tacactagca gagaaggcac caataacatc ccaattgcta gattctcata

601 gaatcatgag tcacaatggc agagacaggt tctgagagtg tgtccttgtt gtaaacagta

661 tgctctacaa actaagttgg ctgcaatatc actaggcagt gttgtcccat aagacaacta

721 tcacatatgt ggtccagtga tgaccaaagc atcttttagc attttgcaaa tgaagctcaa

781 atcgaatatg actaagetea tgeagtacaa atcaaaggta cactgggata gtttaaaaga

841 tacatacttg tactggttag ttttgtgtca gcttgacaca gctggagtta tcacagagaa

901 aagagettea gttgaggaaa tteeteeatg agateeaget atagggeatt tteteaatta

961 gtgatcaagg ggggaaggcc cettgtgggt gggaccatet etgggetggt agtettggtt

1021 ctataagaga gcaggetgag caagccagga gaagcaagcc agtaaagaac atccetccat

1081 ggettetgea teageteetg eteeetgace tgettgagtt eeagttetaa ettettteag

1141 tgatgaacag caatgtggaa atgaaagctg aataaaccct ttcctcccca ttttgcttct

1201 tggtcatgat gtttgtgcag gaatagaaac cctgactaag acaatactat aaaccctaaa

FIGURE 5: mouse proster sequence SEQUENCE LISTING SEQ ID NO:2 ATTORNEY DOCKET NO. 015389-004000US Page 2 of 6

1261 agttgtaaac caaacacatg tgtttccatt aagccatcgt agaacaataa gtactcaacc 1321 ccaagtcaca taactataat cccagccttt gaaaaccggg atcaggaatt caaggctagc 1381 ctcatctata tgtaagatta aagcctgttt gggctgcatg agactttgtt tcaaaaaaaa 1441 aaaaaaaaa gcaaacaggc aaaaacaaac acaagacaag acagatgtaa aatgaaggag 1501 gggtagatgg gtcaagtaga aaatagcata ggaaacgagt caagtataga agaggtggta 1561 gtaaccagat catgcagaag gactcaaggc catctcctca cagtggctta ggtaggcctt 1621 cctctgctct tgagcagggg cagagttgcc gctttaagga ggggatcagt cacctttaag 1681 aactgaaaag etgaacagte tteteaagte agaageeagt ggetteatet tacacetete 1741 ttccttccct tgctactcat attggatctg atgatttgcc caacttggaa gaaacatctc 1801 ttctgaaggg tttcacagac accccatctt tccgagaaag gaccgcatag gctggccatc 1861 cctgtgctta caaaaggaat aattaagaaa cttaattcca taagcaaata caacctttcc 1921 aagccccaag tggatgattt tatcttactg tttttttata tctcatcaaa taacttccaa 1981 gggctcaaaa atccaaagat gtaaaaaagg aactgagctc tgtttgccaa gccatgagga 2041 ttaaataatg acattcaaag agatttttgt gccctaagta ctttttattg gttttcatag 2101 atggtttaat gtgcaagatg aagcaaacag agatgggagt ggtatcagca tggattaagg 2161 tggcagttgt gagggagggg tactgagaga acaggacaag gtaacctatc taaggagagg 2221 ccaagttggc aagtgccagg gacttctaag cccagaacta gtacacattc cttaggtgct 2281 gtttgggaag tcagggagtc accagccttg ggatctataa aagtgcatgg tggcattcac 2341 tcacatactt cctgagctgt tcgatgttga tgaagtcgtg ggtatgagac tgttgtgtca 2401 gtgacaaact atgtaaatga gaatgattgt ttccatcttg accactaaga cgtaaaccgg 2521 ccctggttct gaatggggga gaatccagtg ggagtcggtt gctgccagca tgttggggta 2581 gaaggetgga geatgaeagg teecegagga ttteetgett cetatatggg tagggataet 2641 tgaggtcctc tcttctacct ccttccctgc agggtttata acctctacca ctgtctgtct

FIGURE 5: mouse promoter sequence SEQUENCE LISTING SEQ ID NO:2 ATTORNEY DOCKET NO. 015389-004000US Page 3 of 6

2701 ctgggatage tectagggtg cageceetee ceaaaaagge eteteeetgg ceteatgtet 2761 ctaagaacag ctttctaaag caggcctgtt acacaaaggc tcccttttcc tggcttcatc 2821 gttgctggta gacaacttcc actcgttttc cacttcagtt tcttctactc tgttgttatt 2881 tgattctgat gcttgaaccc agggttgtgt agtcagcaag tgctaccccc tccctcctct 2941 tettigtitt titgaggeag ggteteattt tgeceaagtg gaeetaaatt teageatgta 3001 gctggcctgg ttttgaatgc cttctcatcc tgcctctact tcccaagagt agcttacaag 3061 tgtgcaccac catgeccege gatattetta tttttgagac tgttttetat getggtttet 3121 ttggggaact acactaaggt agcttacaag tgtgcaccac catgccccgc gatattctta 3181 tttttgagac tgttttctat gctggtttct ttggggaact acactaaggt agcttcattg 3241 ttggcataaa tttctcagtt caggcccata tctcctaagt agcagaacta agcaaatctc 3301 aaacaaaccc ctcaaaaaga ctgatgtcca ctaaacggac ttctaaaata gctcctgtaa 3361 tcctgagcat ttacaaggcg gcagacctcc tataagggag taaatatgaa aacgcgcctg 3421 ttcaaatgct aggtcggtgg atagaagcaa tttcctcaga aagctgaagg caccaaaggt 3481 tatatttgtt agcatttcag tgtttgccaa actcagctac agtagagatc acagattccc 3541 tatttcccag agattcaaaa ttcagcagcc cctctctaac tatggctcag agtcgtgtca 3601 ttacatatge eccaacaaca acceecace etateetace eccgeeteae aegtgeaagt 3661 actatcacag ttgccaacct agcagagetg ccatcctaag gtcgaggtcg ccgctttggc 3721 tgtgtgcaca ggcaagegee etcacecaat ggeeetggee ttgetatggg tgegtgagtt 3781 gagatgatgc tctggactct gaggtgaagg ccactggaac agtgaaaaaa gctaacgcag 3841 ggcttttacc tagtcccctt cctttggtgg tgggtgttta cggaacatat ttgggatctg 3901 agtgtatggt cgcaccacaa taaagcctta acctatatag tagaatttca gctgtaatca 3961 ttaagaactg agattgccac cacccacctc actgtctgtg tcaaccacag caggctggag 4021 cagtcagete aggaacagge aaaacettag gteeeteege etaeetaace tteaatacat 4081 caaggatagg cttctttgct tgcccaaacc tcgccccagt ctagaccacc tggggattcc

FIGURE 5: mouse producter sequence SEQUENCE LISTING SEQ ID NO:2 ATTORNEY DOCKET NO. 015389-004000US Page 4 of 6

4141 cagctcaggg cgaaaaggaa gcccgagaag cattctgtag agggaaatcc tgcatgagtg 4201 cgccccttt cgttactcca acacatccag caaccactga acttggccgg ggaacacacc 4261 tggtcctcat gcaccagcat tgtgaccatc aacggaaaag tactattgct gcgaccccgc 4321 cccttccgct acaacgcttg gtccgcctga atcccgcccc ttcctccgtt cccagcctca 4381 tctttttcgt cgtggactct cagtggcctg ggtcctggct gttttctaag cacacccttg 4441 catcttggtt cccgcacgtg ggaggcccat cccggccttg agcacaatga cccgcgctcc 4501 tegttgeece geggtgeget etetgetgeg cageegatae egggaggtgt ggeegetgge 4561 aacctttgtg cggcgcctgg ggcccgaggg caggcggctt gtgcaacccg gggacccgaa 4621 gatctaccgc actttggttg cccaatgcct agtgtgcatg cactggggct cacagcctcc 4681 acctgccgac ctttccttcc accaggtggg cctccaggcg ggatccccat gggtcagggg 4741 cggaaagccg ggaggacgtg ggatagtgcg tctagctcat gtgtcaagac cctcttctcc 4801 ttaccaggtg tcatccctga aagagctggt ggccagggtt gtgcagagac tctgcgagcg 4861 caacgagaga aacgtgctgg cttttggctt tgagctgctt aacgaggcca gaggcgggcc 4921 teccatggee tteactagta gegtgegtag etaettgeee aacaetgtta ttgagaeeet 4981 gcgtgtcagt ggtgcatgga tgctactgtt gagccgagtg ggcgacgacc tgctggtcta 5041 cctgctggca cactgtgctc tttatcttct ggtgcccccc agctgtgcct accaggtgtg 5101 tgggtctccc ctgtaccaaa tttgtgccac cacggatatc tggccctctg tgtccgctag 5161 ttacaggece accegacecg tgggcaggaa tttcactaac ettaggttet tacaacagat 5221 caagagcagt agtcgccagg aagcaccgaa acccctggcc ttgccatctc gaggtacaaa 5281 gaggeatetg agteteacea gtacaagtgt geetteaget aagaaggeea gatgetatee 5341 tgtcccgaga gtggaggagg gaccccacag gcaggtgcta ccaaccccat caggçaaatc 5401 atgggtgcca agtcctgctc ggtcccccga ggtgcctact gcagagaaag atttgtcttc 5461 taaaggaaag gtgtctgacc tgagtctctc tgggtcggtg tgctgtaaac acaagcccag 5521 ctccacatct ctgctgtcac caccccgcca aaatgccttt cagctcaggc catttattga

FIGURE 5: mouse producter sequence SEQUENCE LISTING SEQ ID NO:2 ATTORNEY DOCKET NO. 015389-004000US Page 5 of 6

5581 gaccagacat ttcctttact ccaggggaga tggccaagag cgtctaaacc cctcattcct 5641 actcagcaac ctccagccta acttgactgg ggccaggaga ctggtggaga tcatctttct 5701 gggctcaagg cctaggacat caggaccact ctgcaggaca caccgtctat cgcgtcgata 5761 ctggcagatg cggccctgt tccaacagct gctggtgaac catgcagagt gccaatatgt 5821 cagactecte aggteacatt geaggttteg aacageaaac caacaggtga cagatgeett 5881 gaacaccage ceaeegeace teatggattt geteegeetg caeageagte eetggeaggt 5941 atatggtttt cttcgggcct gtctctgcaa ggtggtgtct gctagtctct ggggtaccag 6001 gcacaatgag cgccgcttct ttaagaactt aaagaagttc atctcgttgg ggaaatacgg 6061 caagetatca etgeaggaac tgatgtggaa gatgaaagta gaggattgee aetggeteeg 6121 cagcagcccg ggtgagcatg gctggtctcc agctgaatgc attaggggcc cagaaaaggg 6181 agacaatggg tggcagtaac ccaggtcccc agtggtgtgg tggctttatg cagtccgtgg 6241 ttggatgagt tecatettat ggtetetgae tecaagetee etecageteg eettgeacaa 6301 actaagatte ttgtccaage cetgggeagg ttctcaggge tggggacatt gtggtgaaca 6361 gataagcaga cggggagcat ggtggatagg agttctggca cagtgcacca gagagagtct 6421 ggaagegeta gtgagageta atgtaaggge eegtggtteg eeaaagaatg ataaeeeegg 6481 actcaaatag tatgccaaag caaggagcat ttcattctgc agaaatcaag catgcaggtg 6541 ggggggggg gttgctctca ttccaagatg gagagacaac caagtataga ttttaagggg 6601 atcgggggcc tttatcttac tccatctcta ggggcattcc attactgggg catggggttg 6661 gaggttggaa actgttaatg gggaggtctg gaaacttgct gccccattgt ccttgcttca 6721 ggctaggtag ctgagtagct tctaatggca ggatagtttc tgactagctg tctaaagtct 6781 ggggtgtttg tttttttgtt ttttctagta acttacttgc ctgaacttgc tcagttttta 6841 ggcctggtct cctggactgc caatttgaag cctattaagg agtcagcctg tctcactact 6901 ccaggttatc tataatcccc ctgtagaacg gtacctcact gataacaatg acagaccaac 6961 ataggaaccc actatecttg tggtgeatga gttteaaagg ttettetggt eeteecagtg

FIGURE 5: mouse properties sequence
SEQUENCE LISTING SEQ ID NO:2
ATTORNEY DOCKET NO. 015389-004000US
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7021 tgcagatcca tgcttaagct atggtcctcc cagtgtgcag atccgtgctt aagctatggt
7081 cttgcagctg ctcgatctac aaagggtagg gtgaacgaag gaaagataaa tgaaaaaaaa
7141 aaaactgttt cctacagtga agatcgctgc cccatcttag ctatgagaag ggactgggga
7201 gtggagcctg gtgcataaaa gaggattgtg ttacttggaa ggctgcagag cctggactcc
7261 tgtgccctcc ttgcctggtt ttctgggttt aatgttgagg ttggccctct gtagtcacta
7321 cctgacccct tccctttcag ccaaccetcc ggttacaccc tgtgcatgta tggaaggggc
7381 caaacgccct atcctgctct cccttcccca aaattcttag gatattaaca acttatgggg
7441 aaaagatggt agagctatgt ttacccacca tgtacttggg aagctccgaa gtaagctt

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